

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P556918

Luminaire Tested: **FUSL-12-4-LD4-2HI-30-UNV-80-87-EDD-90**

Issue Date: 7/16/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P556918
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2105-257-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/16/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FUSL-12-4-LD4-2HI-30-UNV-80-87-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

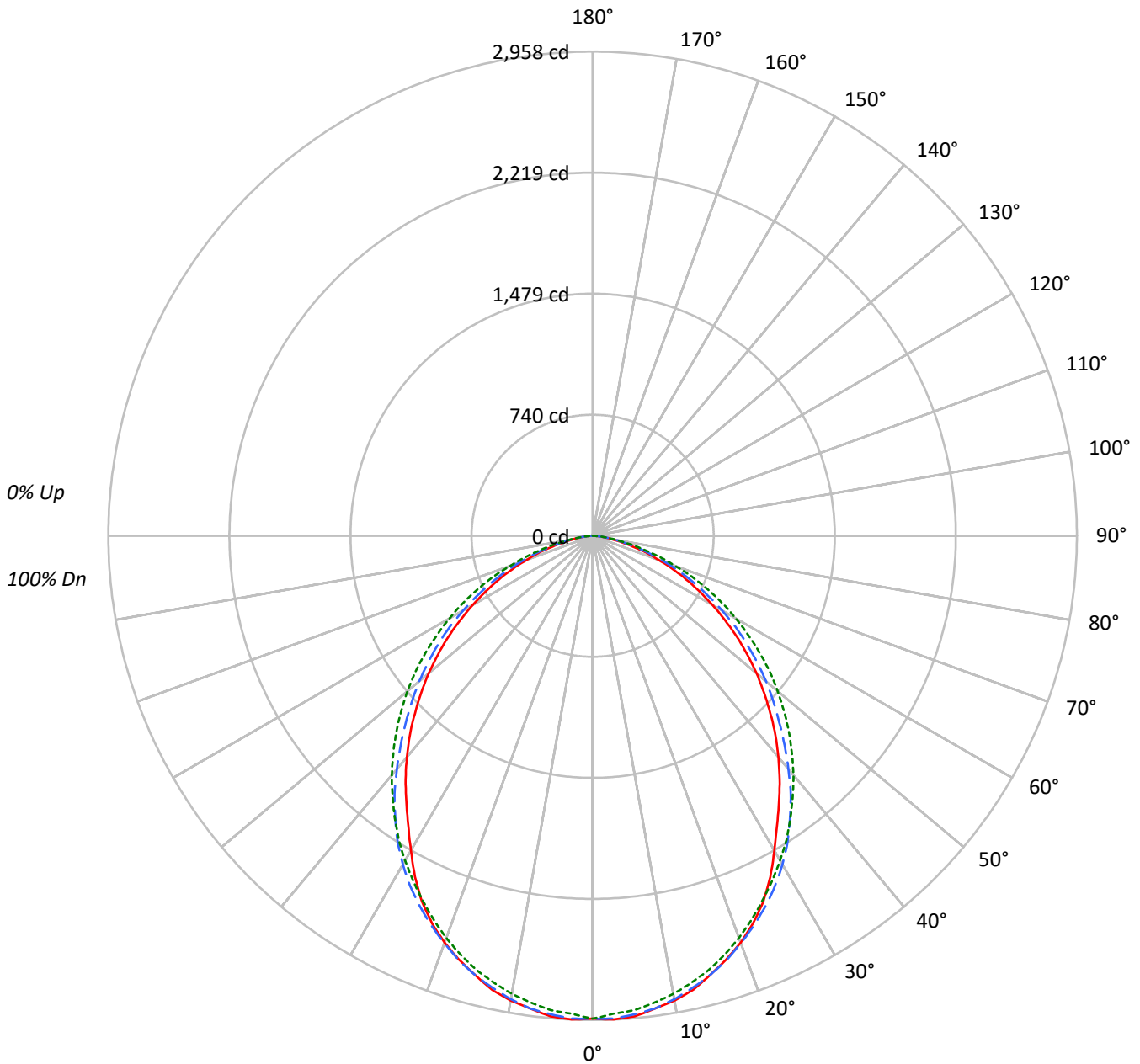
Lumens per Lamp: N/A
Luminaire Lumens: 6822.0 lumens
Efficiency: N/A
Efficacy: 79.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 86.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86																			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73																			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63																			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54																			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47																			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42																			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37																			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34																			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30																			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7939	7939	7939
5°	7960	7927	7859
10°	7876	7854	7764
15°	7736	7736	7648
20°	7572	7582	7485
25°	7323	7414	7296
30°	6896	7206	7118
35°	6516	6907	6918
40°	6199	6534	6705
45°	5845	6138	6453
50°	5471	5784	6178
55°	5046	5381	5844
60°	4545	4910	5435
65°	4013	4366	4944
70°	3344	3718	4200
75°	2628	2969	3288
80°	1880	2091	2318
85°	1226	1226	1155



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	277.8	4.1
10°-20°	780.4	11.4
20°-30°	1140.4	16.7
30°-40°	1294.5	19.0
40°-50°	1249.6	18.3
50°-60°	1030.8	15.1
60°-70°	686.5	10.1
70°-80°	307.2	4.5
80°-90°	55.0	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2198.5	32.2
0°-40°	3493.0	51.2
0°-60°	5773.4	84.6
0°-90°	6822.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6822.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2950	2950	2950	2950	2950	
5°	2947	2946	2934	2919	2910	279
15°	2777	2784	2777	2764	2745	783
25°	2466	2486	2497	2479	2457	1129
35°	1984	2011	2102	2114	2106	1243
45°	1536	1562	1613	1687	1696	1185
55°	1076	1094	1147	1210	1246	960
65°	630	647	686	734	776	625
75°	253	266	286	299	316	276
85°	40	40	40	37	37	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2950.3	2950.3	2950.3	2950.3	2950.3
2.5°	2958.3	2959.4	2952.6	2934.5	2923.1
5°	2946.9	2945.8	2934.5	2918.6	2909.5
7.5°	2914.1	2916.3	2912.9	2890.3	2877.8
10°	2882.3	2883.5	2874.4	2856.3	2841.5
12.5°	2841.5	2840.4	2827.9	2818.9	2795.1
15°	2776.9	2783.7	2776.9	2764.5	2745.2
17.5°	2714.6	2714.6	2719.1	2697.6	2682.8
20°	2644.3	2647.7	2647.7	2630.7	2613.7
22.5°	2562.7	2572.9	2576.3	2558.2	2537.8
25°	2466.4	2485.6	2497.0	2478.8	2457.3
27.5°	2349.6	2379.1	2413.1	2399.5	2375.7
30°	2219.3	2262.3	2319.0	2307.7	2290.7
32.5°	2095.7	2138.8	2217.0	2212.5	2203.4
35°	1983.5	2010.7	2102.5	2113.9	2105.9
37.5°	1877.0	1901.9	1988.1	2014.1	2007.3
40°	1764.8	1792.0	1860.0	1906.4	1908.7
42.5°	1653.7	1679.8	1735.3	1802.2	1802.2
45°	1535.8	1561.9	1612.9	1686.6	1695.6
47.5°	1420.2	1447.4	1497.3	1570.9	1585.7
50°	1306.9	1331.8	1381.7	1453.1	1475.7
52.5°	1189.0	1216.2	1264.9	1330.7	1363.5
55°	1075.6	1093.8	1147.0	1210.5	1245.6
57.5°	957.8	974.8	1034.8	1089.2	1125.5
60°	844.4	865.9	912.4	968.0	1009.9
62.5°	735.6	758.3	797.9	846.7	894.3
65°	630.2	647.2	685.7	734.5	776.4
67.5°	528.2	542.9	581.5	615.5	659.7
70°	425.0	444.3	472.6	505.5	533.8
72.5°	342.3	350.2	374.0	397.8	427.3
75°	252.8	266.4	285.6	299.2	316.2
77.5°	181.4	189.3	200.6	212.0	227.8
80°	121.3	124.7	134.9	137.1	149.6
82.5°	73.7	75.9	78.2	79.3	83.9
85°	39.7	39.7	39.7	37.4	37.4
87.5°	22.7	22.7	19.3	15.9	11.3
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)